DVB T2/C/S2

HD Field Meter, T2 TV & SAT, Spectrum analyzer, MPEG HD pictures, SCR & SAT constellation.

HD

MPEG4

4.3”
TFT 16:10

User’s Guide

UG-EASYMETERT2-EN V1.2

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DISPOSAL of ELECTRONIC EQUIPMENT

Front Panel & Keys

no	Name	Function
1	RF SAT Ingress	SAT input connector 950/2.150 MHz
2	RF TV Ingress	TV/CATV input connector 47-1.000 MHz
3	SPECT Key	Press to visualize spectrum
4	HOME Key	Press to turn on. Keep pressed to turn off.
5	PLAN Key	Press to select SAT, TV & CATV memory plans
6	VOLUME Key	Press to regulate the volume and other adjustments
7	DC@RF IN	LED on with remote control active
8	BATT. CHARGE	LED on during battery charge
9	MAINS	LED on when the meter is connected to the mains power supply
10	CATV Key	Press to go to CATV measurement screen
11	TV Key	Press to go to TV measurement screen
12	SAT Key	Press to go to SAT measurement screen
13	Encoder	Press to confirm, rotate to select
14	Power Supply	External power supply connector, 12/18 Volt DC
15	USB	For PC connection
16	VIDEO input	RCA analog video input connector

'HOME' Screen

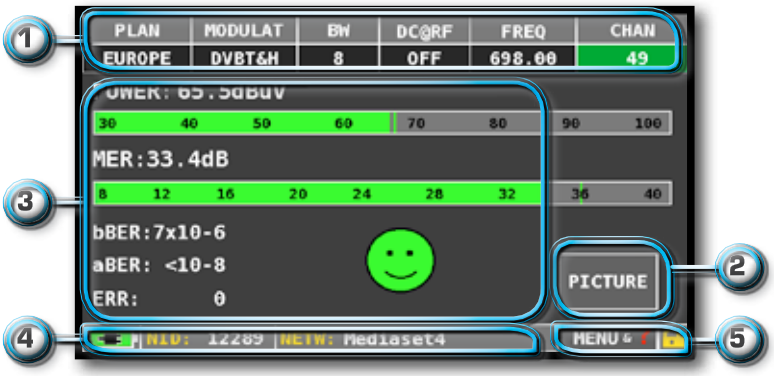
Press the 'HOME' key to go to the home screen, then rotate the wheel to navigate in the 'SAT', 'TV' or 'CATV' icons and press the wheel to select the measurement mode required:

Press the 'HOME' key at any time to return to the home screen.

Navigation

Use the wheel to navigate across the screen and to change values:

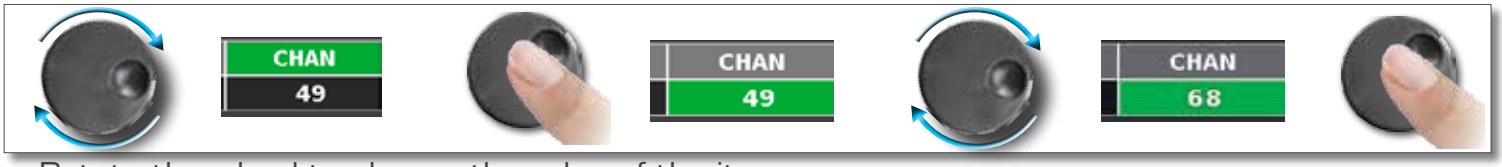
- **DISPLAY ZONES**



1. Tuning parameters
2. Picture
3. Measurements
4. Transport Stream info
5. Context sensitive menu

- **CHANGING VALUES**

Navigate to an item then select,



Rotate the wheel to change the value of the item.

- **DROP-DOWN MENUS**

Navigate in a drop-down menu then keep pressed,

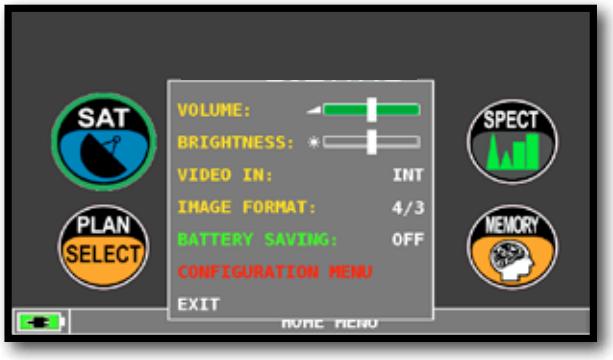
Rotate the wheel to highlight a value and press to select.

- **NUMERICAL KEYBOARD**

Navigate in a numerical value and keep pressed,

Press the key with the value required to insert the numbers.

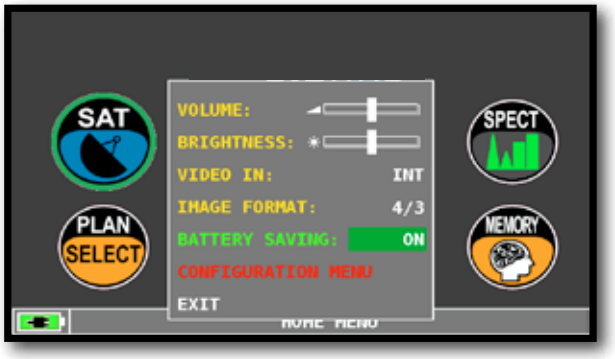
Volume & Configuration



Volume selection is immediately active, press “ENTER” for the Display configuration and other important settings.

BATTERY SAVING & TIMER OFF

Settings for battery save mode:

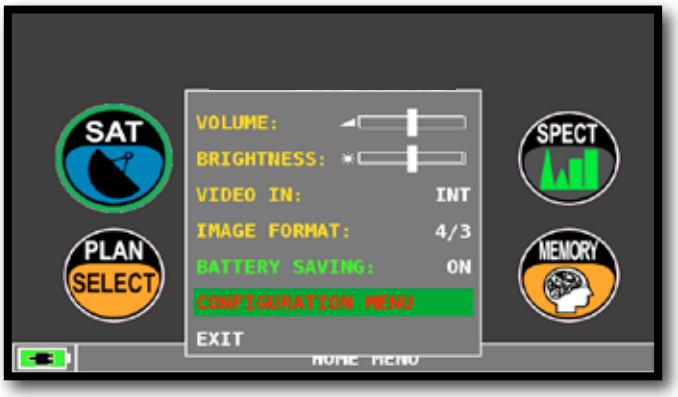


Choose “BATTERY SAVING” from the volume screen. In ON mode, if no key is pressed, after 30 seconds, the display brightness is reduced and after 5 minutes the meter automatically turns off. Press any key to temporarily reset the battery save mode.

Navigate in “CONFIGURATION MENU” then “METER” in the volume screen and set the “TIMER OFF” value required. The meter will turn off after 5 or 10 minutes of inactivity. Press any key to interrupt the automatic turn-off.

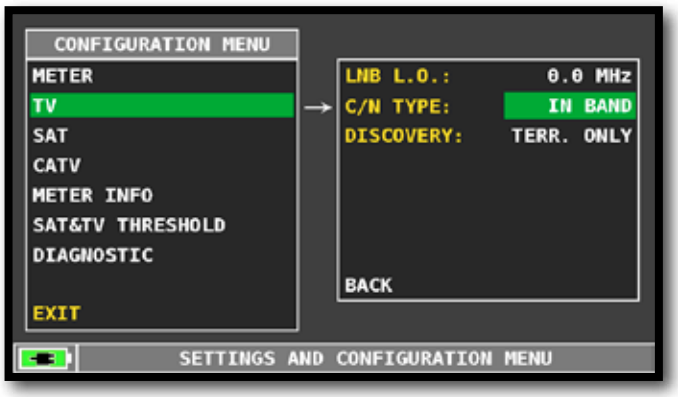
Discovery

Identifies the modulation of a tuned TV channel in the TV master PLAN:



Navigate in the “CONFIGURATION MENU” in the VOLUME window.

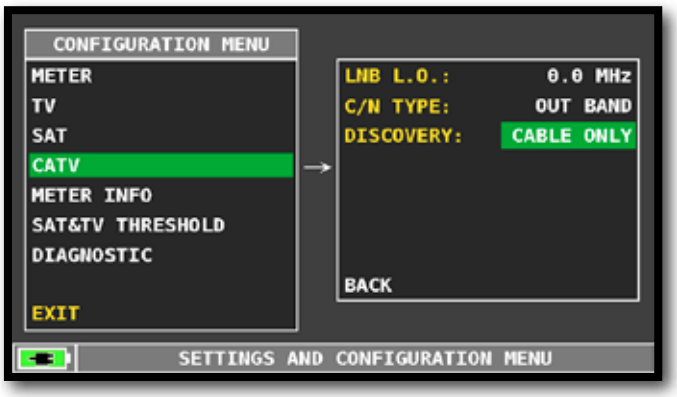
TV Mode



Navigate in “TV” and then “DISCOVERY” and set the identification mode:

- TERR ONLY,
- TERR & CABLE.

CATV (Cable) Mode



Navigate in “CATV” and then “DISCOVERY” and set the identification mode:

- CABLE ONLY,
- TERR & CABLE.

NOTES:

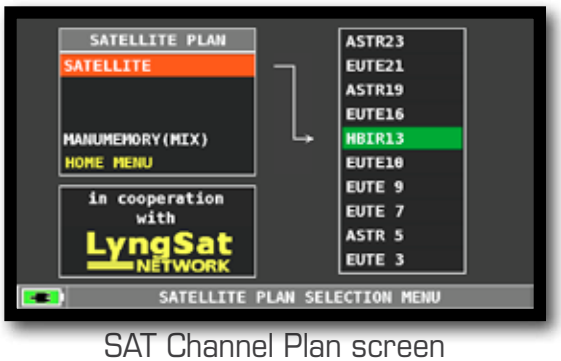
- DISCOVERY mode is active only if the antenna cable is connected to the instrument.

- DISCOVERY mode is not active if you use a manual or automatic memory plan (Manual Memory or Automemory).

SAT

or

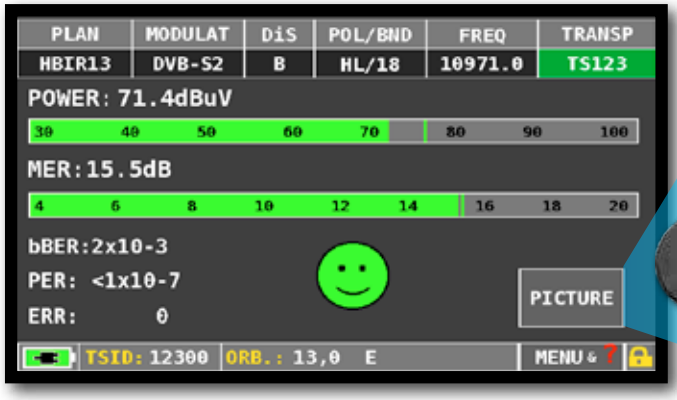
then press



SAT Channel Plan screen

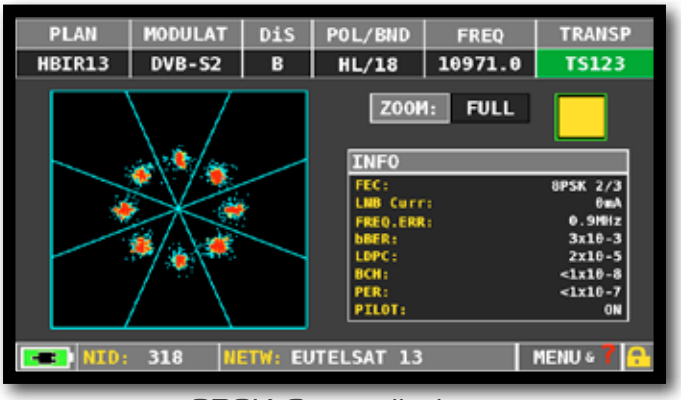
"Satellite information (mux data) is provided in cooperation with LyngSat www.lyngsat.com"

Digital SAT measurement displays DVB-S & DVB-S2

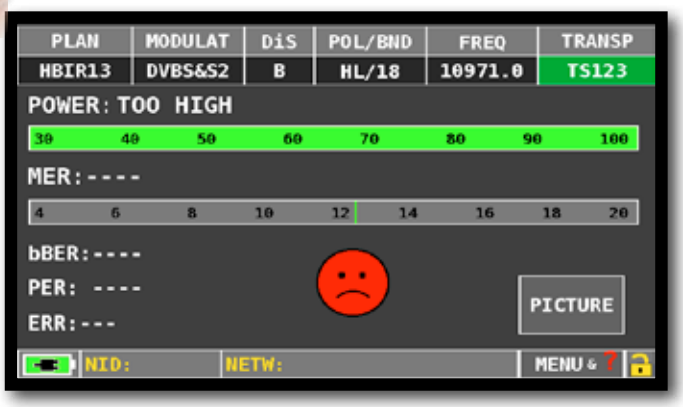


Main Measurements

Navigate in PICTURES, press to zoom, press again to return to the measurement



8PSK Constellation



If the input signal is too high, the meter warns with the following message: "TOO HIGH".

Navigate in "ZOOM" and select the constellation square window to enlarge.

Related Functions

SAT Spectrum

SAT channel PLAN selection

MPEG service LIST

Identifies the tuning parameters of a digital signal

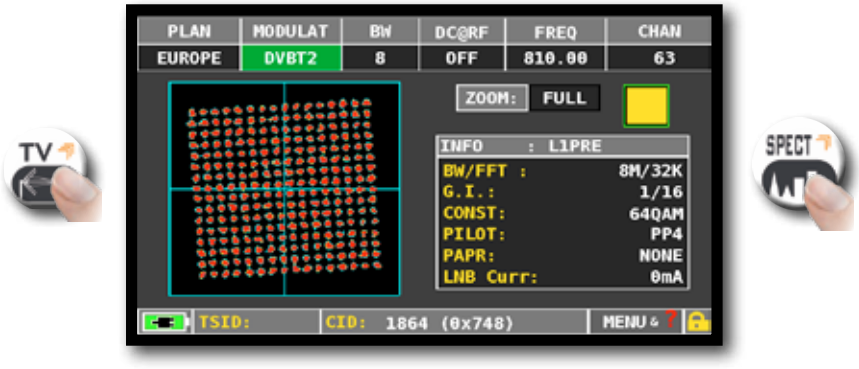
TV (all channels received at the Antenna)

TV Channel Plan screen

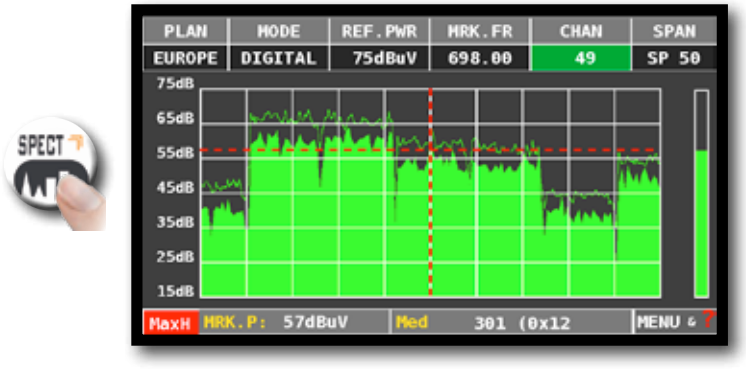
Digital TV measurement displays DVB-T & T2

Main Measurements

Navigate in PICTURES, press to zoom, press again to return to the measurement



DVB-T2 Constellation



Press “SPECT” key to visualize TV Spectrum

Related Functions

TV Spectrum

TV channel PLAN selection

MPEG service LIST

Identifies the tuning parameters of a digital signal

If the input signal is too high, the meter warns with the following message: "TOO HIGH".

Analog TV Measurements

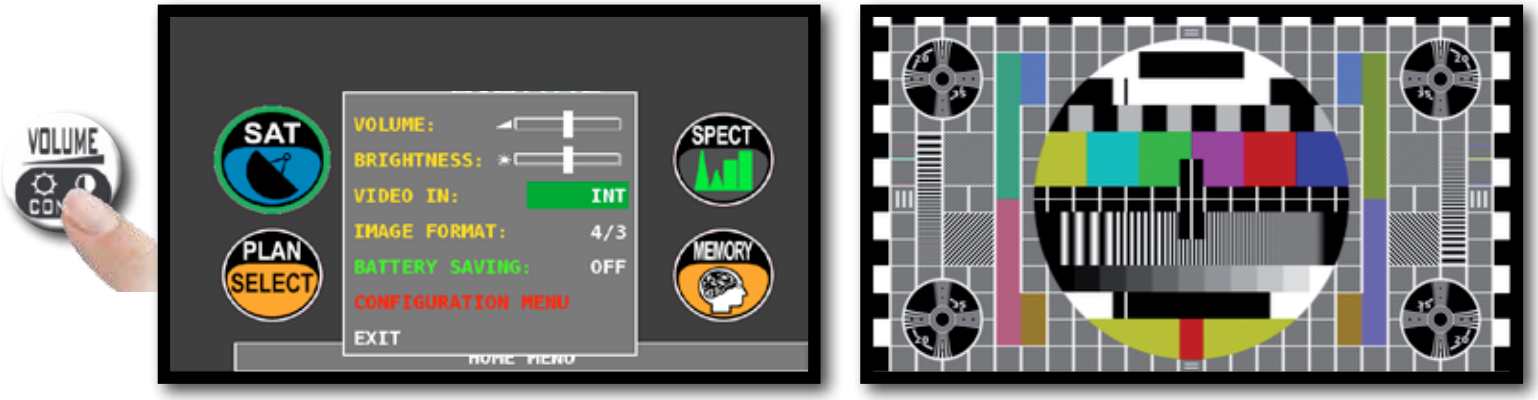
Navigate in "CHAN" to select the required channel.

Main measurements

Navigate in picture and press the encoder wheel to visualize the picture. Press again to go back to the measurements.

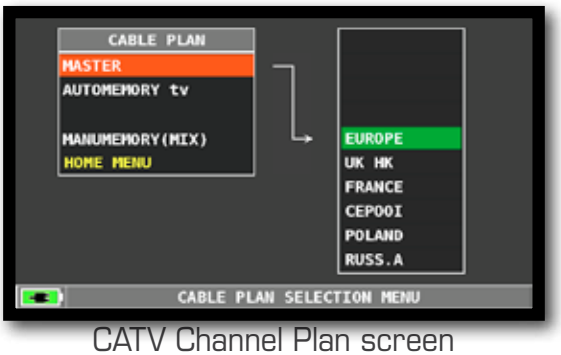
Analog Video Input

Connect an analog video signal to the appropriate RCA connector.



Select VIDEO IN. EXT to visualize the Video Input

CATV (All Antenna & S band channels)

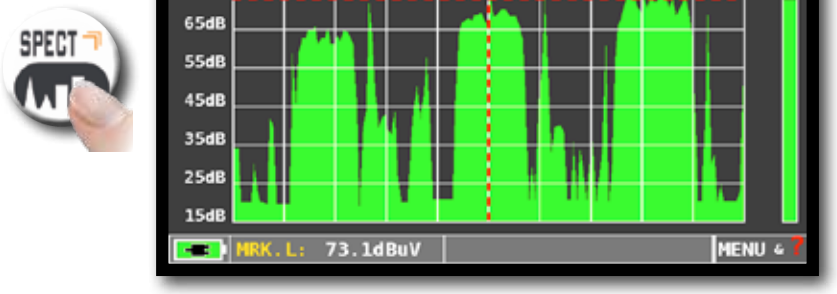


CATV Channel Plan screen

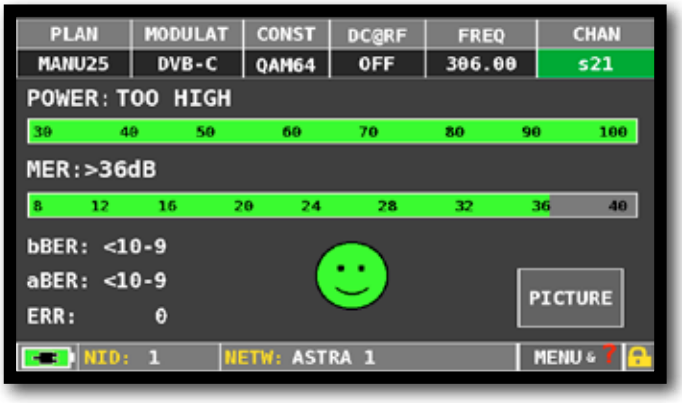
Digital CATV measurement display DVB-C

Main Measurements

Navigate in PICTURES, press to zoom, press again to return to the measurement



Press “SPECT” key to visualize CATV Spectrum



If the input signal is too high, the meter warns with the following message: “TOO HIGH”.

Related Functions

CATV Spectrum

CATV channel PLAN selection

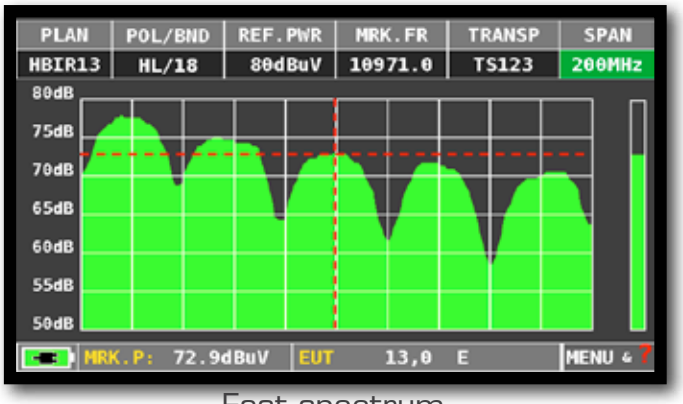
MPEG service LIST

Identifies the tuning parameters of a digital signal

SPECT

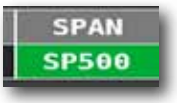
or

Spectrum Analyzer screens

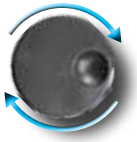


Fast spectrum

Navigate in “SPAN” to modify the value or directly select the active span value:



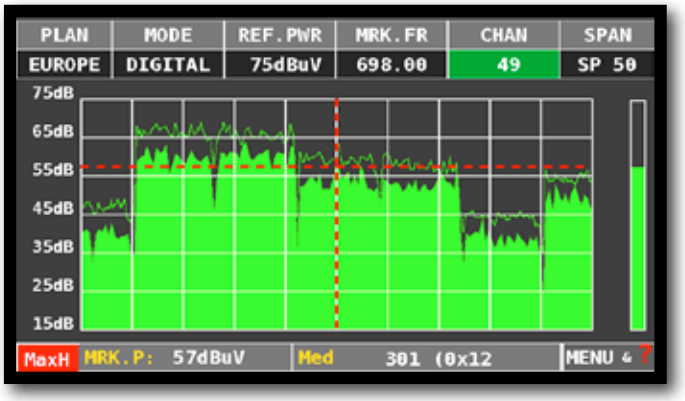
or



rotate to navigate

press to confirm

Press the spectrum key again to activate the “MAX HOLD” function.



Fast spectrum with peak memory “Max H”

Press to cycle through spectrum analyzer screens

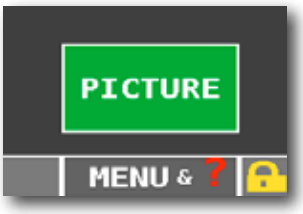
Related Functions

Finds the tuning parameters of a digital signal

Navigate in “MENU” to visualize the additional spectrum functions

LIST (MPEG Service) *show & select available MPEG TS services*

Or navigate in PICTURE in the measurement windows TV-CATV-SAT and press ENTER twice.



Press ENTER to access to the list of MPEG services & pictures.

Rotate the ENCODER to navigate between services.

Select the image and press ENTER to enlarge, press again to return to the measures.

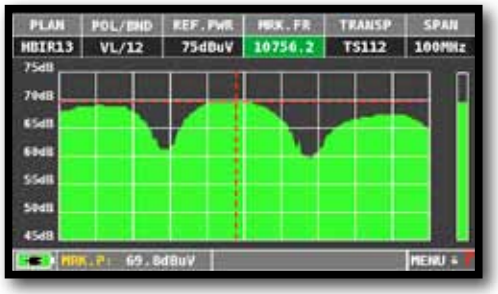
Navigate in Vpid - Apid & press enter to return to the measurements or press the SAT/TV/CATV measurement key.

HELP *inspect the parameters of an unknown signal*

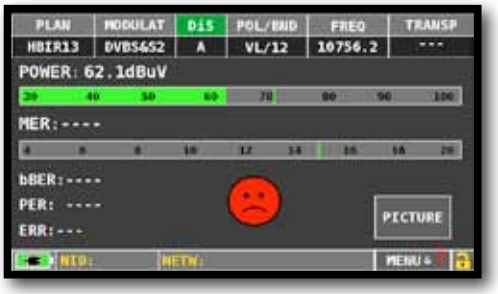
The "help" function identifies the tuning parameters of a digital TV or SAT signal:

How to use the "HELP" function

Spectrum mode move the "mrk.Fr" to the center of a digital carrier,



or



In measurement mode when the lock icon is open (the signal is not locked),

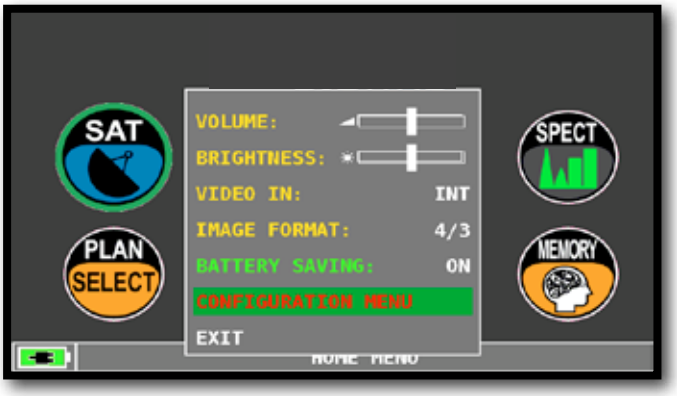
Navigate in "HELP" on the main menu,

Press to start the search,

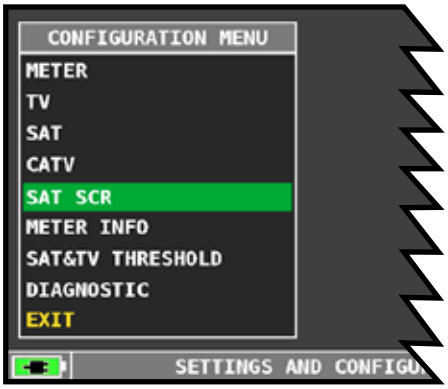
The "help" function will try to identify the tuning parameters of the selected digital carrier.

At the end of the search (the word "Found" will be shown in the 3 boxes) the meter automatically shows the measurement display and the picture of the selected carrier (if available).

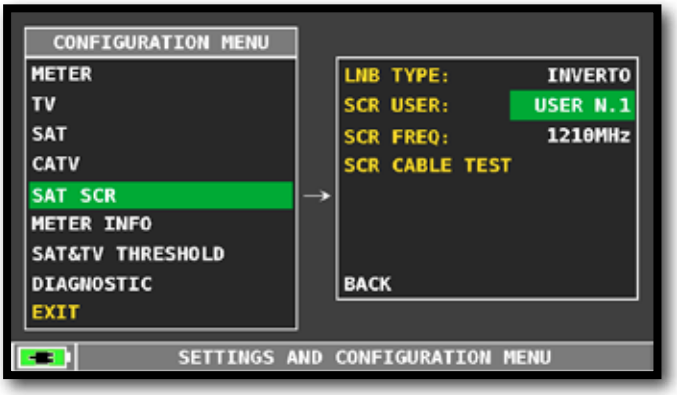
SAT: SAT SCR



Navigate in “CONFIGURATION MENU” from the “VOLUME” screen.



Navigate in “SAT SCR”:

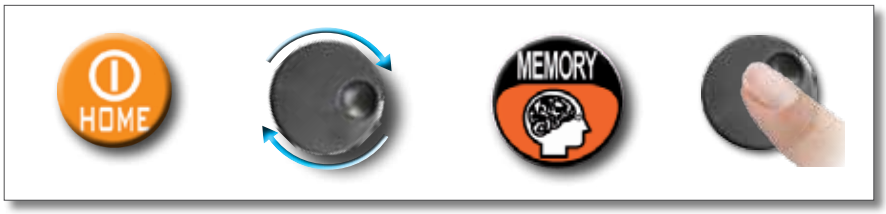


Navigate in “LNB TYPE” and choose the LNB/MULTISWITCH model,

navigate in “SCR USER”, and choose the user number to test (USER 1-8),

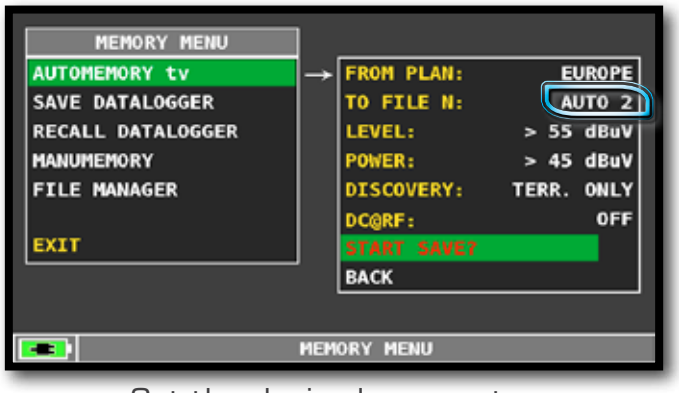
Press “SPECT” to display the spectrum or “MEAS” to start measuring,

or navigate in “SCR CABLE TEST” to perform in spectrum mode the SCR LNB/MULTISWITCH 8 frequencies check (USER 1-8).



AUTOMEMORY (TV)

To automatically store all the existing channels in a city or building.
Navigate in “AUTOMEMORY TV” and press the wheel:



Set the desired parameters:

Navigate in “to FILE N” and select the destination file “AUTO” where the search must be saved.

Navigate in “LEVEL” and set the minimum level threshold of the analog channels searched.

Navigate in “POWER” and set the minimum power level of the digital channels searched.

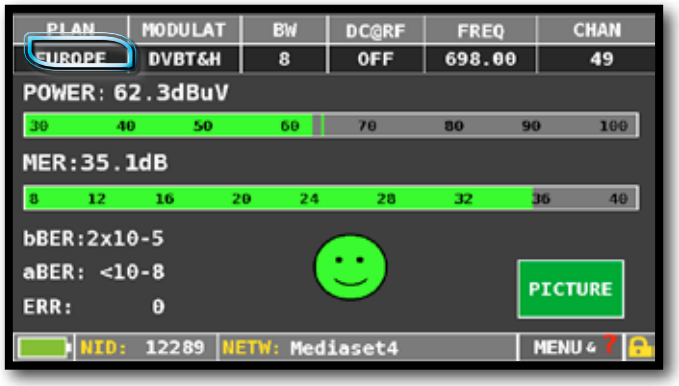
Navigate in “DISCOVERY” and set the channel search mode,

- TERR ONLY (terrestrial only),

- TERR & CABLE (terrestrial & cable),

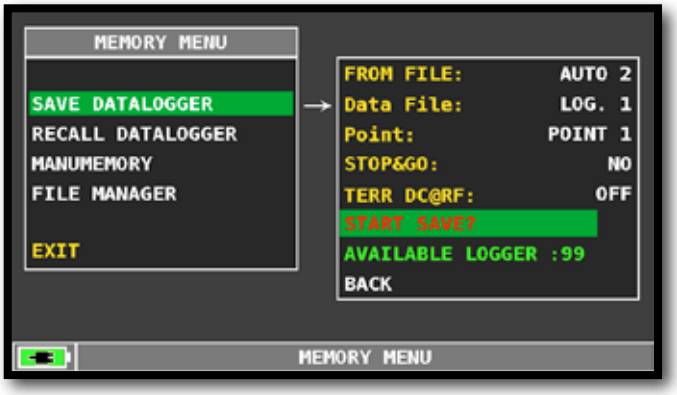
Navigate in “START SAVE” to create a new channel plan and to activate the search.

NOTE: If the words “START OVERWRITE” appear, the selected file will be overwritten, wait a few mins, the meter indicates the recorded ANALOG & DIGITAL Channels.

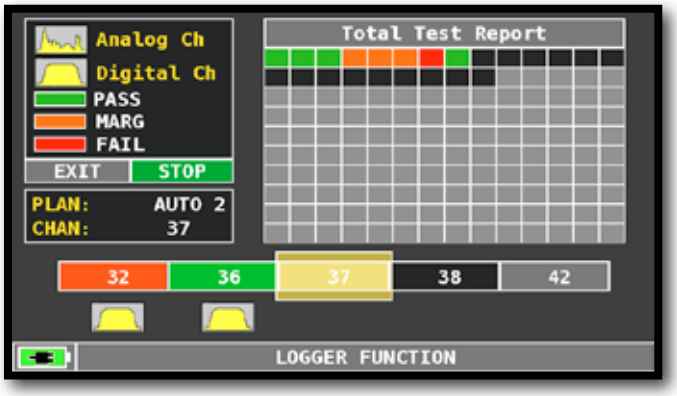


Upon automemory completion the new plan is automatically selected.

Logger SAVE



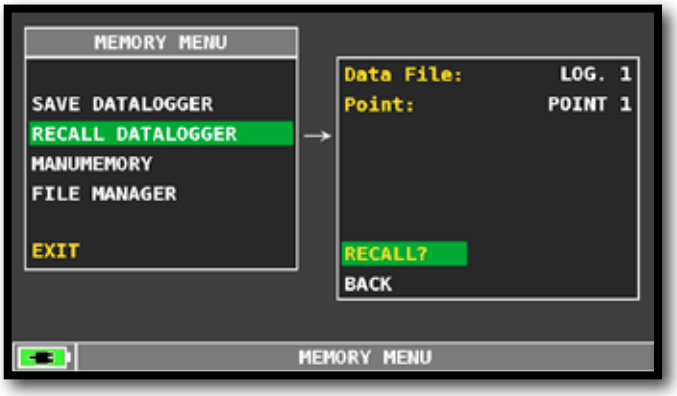
Navigate in "SAVE DATALOGGER" and set the parameters required. Touch "START SAVE" to create a new log file



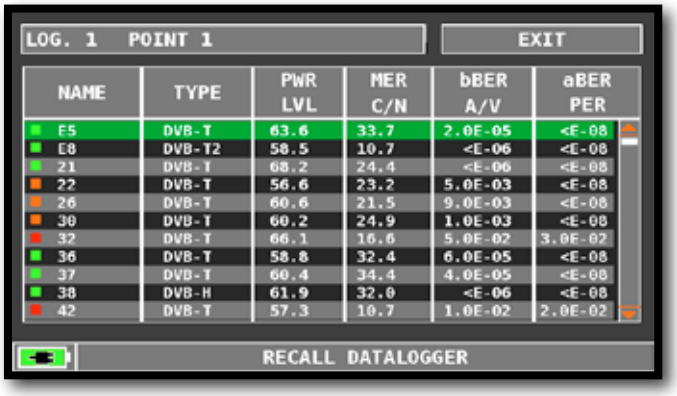
DATA LOGGER run

NOTE: if the MANU plan has mixed TV and SAT programs, the STOP&GO function will assist when running a LOGGER asking to move the cable lead from a TV to a SAT signal source or vice-versa.

Logger RECALL



Navigate in "RECALL DATALOGGER" and Set the LOG file parameters. Touch "RECALL?" to see them,



Browse through measurements saved in the log file,

Rotate to Navigate.

Battery test & Battery regeneration

This procedure explains how to regenerate/check your batteries and calibrate the battery charge indicator.

USEFUL ADVICE:

- Charge the batteries every night after use, even if they are not completely discharged;
- Always use the “BATTERY SAVE” & “TIMER OFF” functions to increase your meter’s autonomy;
- The maximum capacity of the batteries and battery charge indicator’s accuracy improves by up to 20% if you carry out many battery test cycles;
- Do not replace the batteries: first carry out 3 to 5 battery test cycles until you recover the maximum capacity of the batteries.

“BATTERY TEST” INSTRUCTIONS & PROCEDURE:

1. Before carrying out the test connect the meter to the original battery charger:
   - Turn on the meter;
   - Press the volume key and select “configuration menu” (fig. 1);
   - Select the word “meter” and press “ENTER” to confirm (fig. 2);
   - Select “battery test” and select “on” (fig. 2);
   - Press “enter” to confirm;
   - Carefully read the various screens, pressing “enter” in succession;
   - In the last instructions window, select “start” and press “enter” to start the test.

WARNING: the procedure will be cancelled if you select “exit” on any screen.

FIG. 1*

FIG. 2*

FIG. 3*

IMPORTANT ADVICE:

- Do not connect any type of load to the “f” input connector (lnb, tv head-end, amplifiers, etc.).
- Extract the conditional access module (cam), if it is present in your meter.

2. The battery test takes approx. 18 Hours (charging/discharging/recharging activities and measurement of the battery autonomy), during this time the meter must not be used. At the end of the test the meter will turn off automatically. In order to make sure that the test has been carried out correctly, all the meter’s commands are blocked except for the reset function, which remains active so that the meter can be turned off if necessary.
3. The batteries will be completely charged at the end of the test.
4. To check the battery test results, enter METER SETUP, select BATTERY TEST function and read the results: for example 130ACLY (fig.3) = 130 minutes. The “Y” of YES confirms that the battery is still good enough, whereas an “N” for NO indicates that it could be faulty, too deteriorated or that the cycle was interrupted.

IMPORTANT NOTES:

If the test is interrupted using “reset”, the battery charge indicator may provide incorrect indications, therefore repeat the battery test procedure.

** The displays shown in this guide may change according to the model and are subject to change without notice. If you connect your meter, using the S.M.A.R.T. Pro program, from the usb port to the pc, you can download the screens shown above.*

LI-ION Polimer Batteries

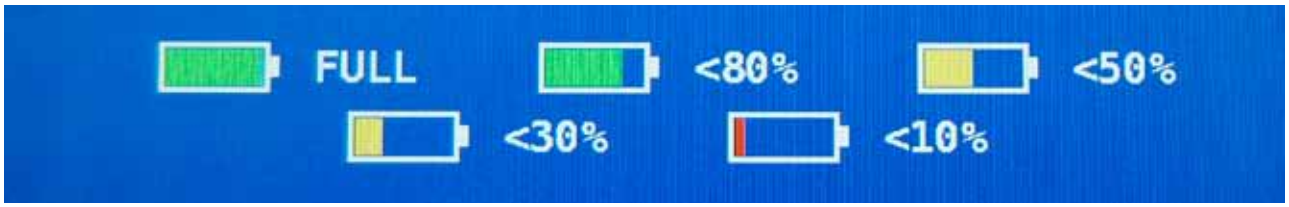
IMPORTANT:

- ALWAYS TURN THE INSTRUMENT OFF BEFORE CONNECTING THE BATTERY CHARGER;
- DO NOT LEAVE THE BATTERIES DISCHARGED FOR LONG PERIODS;
- ALWAYS CHARGE THE BATTERIES AT NIGHT FOR AT LEAST 7 HOURS, EVEN IF THEY ARE NOT COMPLETELY DISCHARGED.

USEFUL INFORMATION:

1. The batteries supplied are high quality and tested individually, the autonomy depending on the following conditions:
   - the LNB power consumption: Single, Dual or Quadruple;
   - the external temperature: with temperatures of less than 10°C, 20% of the capacity is lost;
   - the age of the batteries: a 10% loss in efficiency each year;
   - Remember that the TIMER OFF function, that automatically turns off the Meter after 5 o 10 minutes of inactivity saves up to 30%.
2. The battery indicator has a tolerance (like all battery powered electronic devices) according to the following factors:
   - the battery's charging percentage;
   - external temperatures;
   - battery wear and tear;
   - +/– 2%.

ICONS SHOWING THE BATTERY CHARGE STATUS:



BATTERY AUTONOMY:

The battery autonomy of between: 2 hours min. and 4 hours max.

WARNINGS

RECHARGEABLE BATTERY

This device contains a built-in Li-PO (Lithium polimer) battery that can be recharged many times. The battery contains chemicals that might wear with time even if not used. Please dispose of batteries properly.
Do not take the battery pack apart or expose it to extreme temperatures (over 50°C). If the device has been exposed to very low or high temperatures let it rest at room temperature before use.

RECHARGING THE BATTERY

The Battery must be recharged at room temperature (about 20°C) with the device turned off. To avoid premature failure of the battery never leave the device with an empty battery for prolonged periods.

Power Supply (mains) and Battery Charge (chrg) LED status

INSTRUMENT	CONNECTED TO THE MAINS POWER SUPPLY	▼ LED MAINS	▼ LED BATT CHRG	NOTES
OFF	YES	ON	ON	Batteries in fast charge
OFF	YES	ON	OFF	Battery charge completed
OFF	YES	ON	Flashing 0.5 SECONDS OFF 0.5 SECONDS ON	Abnormal battery temperature. The recharge cycle has been suspended temporarily and will automatically reset.

Meter Maintenance

CLEANING THE METER

Cleaning the meter from dust and dirt is easy and helps mantaining it in optimal work conditions through the years. The cleaning procedure is simple and quick and requires only minor attention.

Never use chemical aggressive products (diluent) and/or abrasive or rough clothes which may damage plastics and displays.

Always use a soft cloth, damped with a simple water and alcohol solution or a de-greasing not abrasive liquid soap.

Keyboard and display should be gently cleaned. Rubbing the keyboard and/or the display(s) may seriously damage their functions.

MAINTENANCE AND CARE OF THE METER

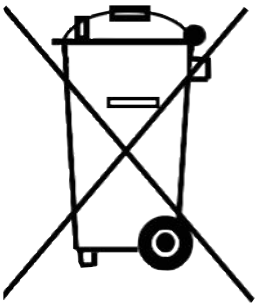
This meter has been designed to withstand severe conditions of use. Even so, its life may be prolonged by respecting some simple and effective rules:

- The meter has not been designed to withstand high temperatures (over 60°C or 140° F). Those temperatures can be easily reached when the meter is left in a car, especially behind the windshield, or in the trunk. The LCD display and/or other details may easily be damaged by the extreme temperature.
- The internal battery may rapidly loose its efficiency if exposed to high or low temperatures. This will result in reduced autonomy of the meter when powered by internal battery.
- When recharging the internal battery, do allow a good air circulation around the meter and the adapter: do not cover it with clothes and do not recharge the battery when the meter is contained in its transport case
- The meter is not waterproof, even if it is protected against incidental water drops. In case of contact with water, electronic circuits may be damaged, allow the meter to dry thoroughly before trying to turn it on. Do not use hairdryer or other strong heating sources, but just leave the meter in quiet air. If possible, contact Rover Laboratories S.p.A. Technical Assistance.

Disposal of electronic equipment

Disposal of electric/electronic equipment (applicable in all CEE countries and whereever separate waste collection system is applied).

This symbol on the packaging indicates that the product should not be considered as domestic waste. The product, at the moment of disposal, should be brought to a waste collection point with the proper facilities to manage electrical/electronic appliances.



Electric/electronical appliances, if not disposed of correctly, may have negative consequences on your health and enivironment.
Furthermore, a proper recycling procedure helps mantaining natural resources.
For more information about the correct disposal of this product, please refer to your local waste management offices or the shop where this product was bought.